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PATENT APPLICATION

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, Colorado 80527-2400ATTORNEY DOCKET NO. 200209329-1IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Ming C. Hao, et al.

Confirmation No.: 3816

Application No.: 10/694,076

Examiner: Michelle K. Lay

Filing Date: October 27, 2003

Group Art Unit: 2628

Title: Visual Boundaries for Aggregate Information in Pixel-Oriented Graphs

Mail Stop Appeal Brief - Patents  
Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450TRANSMITTAL OF REPLY BRIEFTransmitted herewith is the Reply Brief with respect to the Examiner's Answer mailed on August 30, 2007.

This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new ground rejection.)

No fee is required for filing of this Reply Brief.

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Date of facsimile: October 29, 2007

Typed Name: Nancy Meshkoff

Signature: 

Respectfully submitted,

Ming C. Hao, et al.

By 

Dan C. Hu

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Rev 10/07 (ReplyBrt)

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicants:	Ming C. Hao et al.	§	Group Art Unit:	2628
Serial No.:	10/694,076	§		
Filed:	October 27, 2003	§	Examiner:	Michelle K. Lay
For:	Visual Boundaries for Aggregate Information in Pixel-Oriented Graphs	§	Atty. Dkt. No.:	200209329-1 (HPC.0420US)

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**REPLY BRIEF**

Sir:

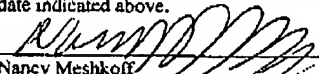
The following sets forth Appellant's Reply to the Examiner's Answer dated August 30, 2007.

**I. REPLY TO EXAMINER'S ANSWER REGARDING CLAIMS 1, 2, 8, 11, 13-15, 18, 20-22, AND 24**

In the Examiner's Answer, the Examiner cited to a new passage of Keim 2002 ("Hierarchical Pixel Bar Charts"). Specifically, the Examiner cited to Fig. 12 of Keim 2002 on page 265, as well as to § 5.5 on page 264 of Keim 2002. These passages were not identified in the final rejection; as a result, Appellant was not previously given an opportunity to respond to this new reading of Keim 2002 by the Examiner.

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Nancy Meshkoff

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Even based on this new citation, Keim 2002 still fails to disclose the subject matter of claim 1. Note that claim 1 recites a method for generating a pixel-oriented graph, comprising:

- **determining a visual boundary** for representing an aggregate of a set of values of a variable depicted in the pixel-oriented graph;
- **constructing a set of pixel blocks** that represent the values **such that the pixel blocks are visually distinguished by the visual boundary**, each pixel block having a set of pixels and each pixel having a pixel value that visually represents one of the values of the variable.

Although Fig. 12 of Keim 2002 on page 265 shows the presence of average lines, note that Keim 2002 does not teach the specific order of the tasks of claim 1. Claim 1 specifically specifies that the determining of the visual boundary is performed **before** the constructing task of claim 1. This order is clearly specified by the fact that the constructing task refers to “**the visual boundary**,” which is the visual boundary of the “determining” task.

Thus, according to claim 1, a visual boundary is first determined for representing an aggregate of a set of values of a variable depicted in the pixel-oriented graph, followed by constructing a set of pixel blocks that represent the values **such that the pixel blocks are visually distinguished by the visual boundary**.

In contrast, according to Keim 2002, the bar charts representing various columns, as depicted in Fig. 12 of Keim 2002, are drawn first, followed by drawing in the white divider lines to separate each bar chart into two halves. There is nothing in § 5.5 on page 264 in Keim 2002 that would disclose that a visual boundary is first determined, followed by constructing a set of pixel blocks such that the pixel blocks are visually distinguished by the visual boundary. Note that § 5.5 of Keim 2002 makes the following statement: “To show aggregated values, pixel bar charts can employ average/median lines.”

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The fact that the pixel bar charts in Fig. 12 of Keim 2002 "can employ average/median lines" suggests that a pixel bar chart is first drawn, followed by drawing in the average/median line into the pixel bar chart.

Therefore, it is respectfully submitted that Keim 2002 does not disclose the method according to claim 1.

Independent claims 13 and 20 are similarly allowable over Keim 2002.

## **II. REPLY TO EXAMINER'S ANSWER REGARDING CLAIMS 9, 16, AND 23**

With respect to these claims, the Examiner appears to have mis-understood Appellant's argument. Appellant's argument is that nowhere in Keim 2002 is there any disclosure or hint of filling in one or more **gaps** in the pixel blocks by **replicating** one or more pixels in the pixel blocks. It is the combination of filling in of gaps and the replicating that is clearly not taught by Keim 2002. Although Keim 2002 notes that bars are to be filled, there is no teaching that the bars are to be filled **by replicating one or more pixels in the pixel blocks**.

Therefore, the above claims are non-obvious over Keim 2002.

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**III. CONCLUSION**

In view of the foregoing, and in view of the arguments presented in the Appeal Brief, reversal of all final rejections is respectfully requested.

Respectfully submitted,



Date: October 29, 2007

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